My tracker on one occasion actually counted 40, and by the time I had succeeded in reversing the Ciné film behind a totally inadequate tree, the herd was grazing on each flank within 20 yards. They were not in the least suspicious until, having finished my film, I deliberately sent them off for fear of being run over by accident should they get my wind on moving behind me.

The photograph of the elephant shows a good tusker in his prime, which Major Phythian Adams and I succeeded after some effort, in working out of tree jungle into a fairly good light about 9 a.m. I managed to take 50 feet of cine film within 30 yards before the tusker made off into the river bed amidst dense 'lantana' growth, which was too thick (and the light too bad) for further

efforts.

Both photos were taken at the northern foot of the Nilgiris. I was able to obtain a riding elephant for a few days to try for cine pictures of Chital, (the unburnt grass being 5 feet high) and the dislike of most animals, particularly pig, and to a somewhat lesser extent chital, to the near approach of an elephant was extremely noticeable—sambhur were much more tolerant.

There are many elephants in these forests, and the behaviour of other animals generally, appears an interesting commentary on the disposition of solitary elephants towards jungle life, apart from man.

It was noticeable that most animals did not dash away, as they would have on smelling or seeing man, but (for example chital) slipped quietly away in the long grass with tails down and no warning cries. This may be a suitable subject for discussion.

Practically all shooting in South India is done on foot.

H. J. ROSSEL,

Major.

25 WARWICK ROW, MEERUT. October 2, 1939.

## VI.—ON THE DISTINCTION BETWEEN INDIAN AND MALAYAN GAUR.

(With a plate).

In the Honorary Secretary's report for the year 1938, Mammals, it is indicated that Lydekker differentiates between the Malayan Gaur and the Indian Gaur by the smaller development of the cranial ridge in the former as opposed to the marked development in the latter, and to some differences in colour and markings and the presence of a dewlap. Mr. Theodore Hubback disposes of this last suggestion. I therefore think it to be of general interest if you would publish the enclosed 4 photos which I venture to suggest completely dispose of the first theory. These four bulls were all shot within a radius of 10 miles in Darrang, Assam and

clearly show a marked difference in cranial development although

the horns may be said to be of equal calibre.

Whilst on the subject of Bison, I should be greatly interested to hear if any further light has been shed on the vexed question of whether it has been established that there is a wild species of Bos frontalis. Any Assamese or Mikir Shikari will glibly talk of Muh, (buffaloe) Mithan and Gurov, (cow) Mithan, but although I have seen many mithan I have never succeeded in establishing any differences. I know many well-known and reliable Europeans who believe in the two wild species, but is there yet any scientific proof in the matter? I may say, in case it is suggested that my photos represent Bos frontalis and Bos gaurus, that all these animals were large black, almost hairless bulls none of which on account of size alone could be described as Gurov (cow) Mithan, but all, from the Assamese standard were Muh Mithan.

R. M. PIZEY, Hon. Forest Officer.

Monabarie,
Mijikajan, P.O.,
Assam.
September 22, 1939.

[Lydekker in his Catalogue of Ungulates—Mammals issued by the British Museum recognises three local races of the Gaur. The distribution of the typical race Bos gaurus gaurus is given as the Peninsula of India including Nepal, Bhutan and Assam. The second race Bos gaurus readi is given as inhabiting the hill forests of Burma and Tenasserim, while the third race Bos gaurus hubbacki is assigned to the Malay Peninsula.

The Indian and Burmese races are said to be distinguished from the Malay race by the presence of a forwardly inclined and prominent ridge between the horns, which gives the forehead a concave outline. This however is a character which may be

absent in both Indian or Burmese Gaur.

Stuart Baker writing of the Gaur in Assam (Journ. B.N.H.S., Vol. xv, p. 227) says that the majority of heads have a concave forehead, but that many have it only very slightly so and some not at all. He publishes a number of outline drawings in which he illustrates this variable character. All that can be said for this point of distinction betwen the Indo-Burmese and the Malay races is that while it may be applicable in general, it is not an absolute point of distinction as the concavity of the forehead may be very slight or entirely absent in many gaurs found within the Indo-Burmese region.

The Mithun, it is now established, is nothing more than a hybrid gaur. It is the result of crossbreeding between wild Gaur and domestic cattle. In Assam where inter-crossing between Gaur and Mithun still takes place, Mithun still closely resemble Gaur. In fact, there is more or less a gradual transition between the









Skulls of 4 Gaur [Bos (Bibos) gaurus] shot within a radius of 10 miles in Darrang, Assam. Note the marked variation in the development of the cranial ridge.